

Abstract

A linear rolling bearing for transmitting torques about its longitudinal axis, having an inner profile element (2) and an outer profile element (1) which surrounds the inner profile element (2) at least partially, the two profile elements (1, 2) being mounted via rolling bodies (3) such that they can be displaced with respect to one another in the longitudinal direction, which rolling bodies (3) circulate endlessly in at least one first circulatory channel (5) and in at least one second circulatory channel (6), the circulatory channel (5, 6) having a loadbearing channel (7, 10) which is parallel to the longitudinal axis, a return channel (8, 11) which is parallel to the longitudinal axis, and two deflection channels (9, 12) which connect the loadbearing channel (7, 10) and the return channel (8, 11) to one another in an endless manner, the rolling bodies (3) which are arranged in the loadbearing channel (7) of the first circulatory channel (5) being provided for transmitting a torque between the two profile elements (1, 2), and the rolling bodies (3) which are arranged in the loadbearing channel (10) of the second circulatory channel (6) being provided to transmit a torque in the opposite direction between the two profile elements (1, 2), it being possible to connect the first circulatory channel (5) and the second circulatory channel (6) to one another for jointly transmitting torques, the return channel (8, 11) of the circulatory channel (5, 6) which can be respectively connected being used as a loadbearing channel and the loadbearing channel (7, 10) of the circulatory channel (5, 6) which can be respectively connected being used as a return channel.

Figure 1